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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/622,356	08/15/2000	Wolfgang Scholl	VAL-487-A	3584

7590

12/17/2002

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EXAMINER

BALSIS, SHAY L

ART UNIT

PAPER NUMBER

1744

DATE MAILED: 12/17/2002

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/622,356

Applicant(s)

SCHOLL ET AL.

Examiner

Shay L Balsis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Oath/Declaration

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

The information and signatures for the third and subsequent joint inventors are not supplied. All inventors must supply their name, residence, citizenship, post office address and signature.

Specification

The disclosure is objected to because of the following informalities:

Page 4, line 13, reads "the connecting rod I takes place..." however, it should read -the connecting rod 1 takes place...-

Page 4, line 27, reads "control arm 5 are Manufactured as..." however, it should read - control arm 5 are manufactured as...-

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9, lines 3-6, reads "a hinged part is coupled to the connecting rod and a wiper blade and placed on one of the hinged part and on a wiper rod connected to the hinged part can

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be pressed against the windshield to be wiped by a spring element that is mounted on the four-hinged wiper arm...". The examiner is unsure what the applicant is trying to claim. Is the hinged part is coupled to the connecting rod and the wiper blade? What is placed on one of the hinged parts? These lines of the claim are very confusing and need clarification as to what the applicant is trying to claim. Please correct.

Claim 12 recites the limitation "the outer ring" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "the inner ring" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitation "wobble riveting" in line 2. Examiner is unsure what wobble riveting refers to. The specification does not go in to depth about wobble riveting and the drawings fail to show how the bolt would wobble, whether by spacing or something else.

Claim 16 is a dependent claim, however, there is no reference to what claim it is dependent on. Examiner is examining the claim as if were dependent on claim 9. If this is an incorrect assumption, applicant must make the proper correction.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipated by Leroy et al. (EP 0182123).

Leroy et al. discloses a 4-hinged wiper arrangement for cleaning windows of vehicles. The wiper comprises a connecting rod (3) that is pivotally connected to a drive arm (4) at a first roller bearing point (13) and to a control arm (1) at a second bearing point (11). There is a hinged part (56) that connects the connecting rod to the wiper arm. The wiper blade is attached to the wiper arm thus, the spring force from the hinge causes the wiper blade to be pressed against the windshield.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Leroy et al. (EP 0182123).

Leroy discloses the claimed invention except he is silent about what material the drive arm and control arm are made of. It would have been obvious to one having ordinary skill in the

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art at the time the invention was made to make the arms out of sheet metal, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious engineering choice. In re Leshin, 125 USPQ 416.

Claims 10, 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leroy et al. (EP 0182123) in view of Enger-Walter (GB 2145168).

Leroy discloses all the essential element of the claimed invention however, he fails to mention a deep-groove ball bearing. Leroy teaches pivot pins or bushing on his hinges. Enger-Walter teaches a connecting gear for a windshield wiper that comprises a deep-groove ball bearing (15). The outer ring (16) of the ball bearing is axially secured and held so that it does not rotate in a recess of the connecting rod. A pin (13) is fitted into the inner ring (14) of the ball bearing and is axially secured and non-rotatably held (lines 67-75). With respect to claim 13, it is difficult to know if the pin used in the prior art is riveted since riveting is a matter of installation. Therefore, it can be assumed that Enger-Walter's pin is riveted. With respect to claim 14, as far as the Examiner understands, the pin is secured by wobble riveting as shown in figure 2 by the gap between the ball and the outer ring. There is a flange in the middle region of the crank arm (10) and the connecting rod (11). Leroy and Enger-Walter are analogous art because they are from the same field of endeavor of windshield wiper connections hinges. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Enger-Walter's groove ball bearings in place of all Leroy's bushings. The motivation for doing so would have been to increase the life of the pivot point, since it is known in the art that

ball bearings last longer than bushing. Therefore, it would have been obvious to combine Enger-Walter with Leroy to obtain the invention of as specified in claims 10, 12-16.

Claims 9-10, 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schael et al. (DE 19501211) in view of Enger-Walter (GB 2145168).

Schael discloses a wiper arrangement for cleaning windows of vehicles. The wiper comprises a connecting rod (1) that is pivotally connected to a drive arm (2) at a first bearing point (4) and to a control arm (3) at a second bearing point (5). There is a hinged part (20) that connects the connecting rod to the wiper arm. The wiper blade is attached to the wiper arm thus, the spring force from the hinge causes the wiper blade to be pressed against the windshield. Schael does not expressly disclose a deep-groove ball bearing. Schael teaches pivot pins or bushing on the hinges. Enger-Walter teaches a connecting gear for a windshield wiper that comprises a deep-groove ball bearing (15). The outer ring (16) of the ball bearing is axially secured and held so that it does not rotate in a recess of the connecting rod. A pin (13) is fitted into the inner ring (14) of the ball bearing and is axially secured and non-rotatably held (lines 67-75). With respect to claim 13, it is be difficult to know if the pin used in the prior art is riveted since riveting is a matter of installation. Therefore, it can be assumed that Enger-Walter's pin is riveted. With respect to claim 14, as far as the Examiner understands, the pin is secured by wobble riveting as shown in figure 2 by the gap between the ball and the outer ring. There is a flange in the middle region of the crank arm (10) and the connecting rod (11). Schael and Enger-Walter are analogous art because they are from the same field of endeavor of windshield wiper connections hinges. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Enger-Walter's groove ball bearings in place of all Schael's

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bushings. The motivation for doing so would have been to increase the life of the pivot point, since it is known in the art that ball bearings last longer than bushing. Therefore, it would have been obvious to combine Enger-Walter with Schael to obtain the invention of as specified in claims 9-10, 12-16.

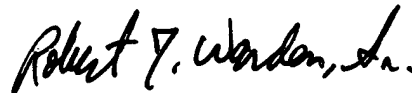
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L Balsis whose telephone number is 703-305-7275. The examiner can normally be reached on 7:30-5:00 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Warden can be reached on 703-308-2920. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-8771 for regular communications and 703-305-5408 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5665.

Slb
December 11, 2002



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